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around the horizontal axis **24** of the first attitude is restrained over a range smaller than 180 degrees. Here, the range may be set at an extent of 160 degrees.

When the horizontal axis **24** rotates around the vertical axis **25** by 180 degrees in the clockwise direction, the horizontal axis **24** takes the second attitude, as shown in FIG. **14**. In this case, the contact piece **78** may be positioned at the retreat position. The contact piece **78** retreats from the movement path **87** of the display enclosure **15**. The display enclosure **15** can be overlaid on the front flat surface of the main enclosure **14** around the horizontal axis **25** of the second attitude, as shown in FIG. **4**. The user of the cellular phone terminal **11** is allowed to look at the screen of the LCD panel **17** on the optical axis of the camera lens directed to an object.

The cellular phone terminal **11a** enables restriction of the relative rotation of the display enclosure **15** around the horizontal axis **24** within a range smaller than 180 degrees, such as 160 degrees, when the restriction member **77** is positioned at the front position. The relative rotation of 160 degrees serves to establish a superior positional relationship between the speaker on the display enclosure **15** and the microphone on the main enclosure **14** in conformity with the positional relationship between the ear and mouth of the user. The user is allowed to enjoy a superior acoustic performance of the cellular phone terminal **11a**.

Moreover, a range of the relative rotation may be set at any extent within a range smaller than 180 degrees based on the size of the restriction member **77** at the front position. In addition, the retreat position may be set anywhere to establish a desirable range of the relative rotation, so that the range of the relative rotation can be set larger than 180 degrees.

FIG. **15** schematically illustrates the structure of a cellular phone terminal **11b** according to a third embodiment of the present invention. The cellular phone terminal **11b** includes a cam mechanism **88** causing the movement of the restriction member **77**. The cam mechanism **88** has a protrusion **89** standing from the bearing **26**, and an elastic member such as a coil spring **91** interposed between the guide piece **82** and the dressed cover **54**. The protrusion **89** protrudes in the centrifugal direction around the vertical axis **25**. The restriction member **77** is designed to receive a driving force urging the restriction member **77** from the front position to the retreat position based on the elasticity of the coil spring **91**.

As shown in FIG. **16**, a cam surface **92** is formed on the protrusion **89**. The cam surface **92** may be defined based on the generatrices parallel to the vertical axis **25**. A datum imaginary cylindrical surface **93** is defined around the vertical axis **25**. The datum imaginary cylindrical surface **93** is set according to the restriction member **77** at the retreat position. Specifically, the radius of the datum imaginary cylindrical surface **93** corresponds to the distance between the vertical axis **25** and the restriction member **77** at the retreat position.

When the horizontal axis **24** takes the second attitude, the restriction member **77** is positioned along the datum imaginary cylindrical surface **93** at a first generatrix **94**. When the horizontal axis **24** takes the first attitude, the restriction member **77** is positioned along the cam surface **92** at a second generatrix **95**. The first and second generatrices **94**, **95** and the vertical axis **25** are aligned within a plane. The cam surface **92** gets remoter from the datum imaginary cylindrical surface **93** as it gets closer to the second generatrix **95**.

The lug **81**, the depressions **85** and the protrusion **86** can be omitted from the cellular phone terminal **11b**. Likewise,

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the opening **79** may be omitted from the dressed cover **54**. The exteriors of the dressed cover **54** can be improved. Like reference numerals are attached to structure or components equivalent to those of the aforementioned first and second embodiments.

As shown in FIG. **17**, when the horizontal axis **24** rotates around the vertical axis from the second attitude to the first attitude, the cam surface **92** serves to urge the restriction member **77** away from the vertical axis **25** against the elasticity of the coil spring **91**. The contact piece **78** can thus be positioned at the front position. The contact piece **78** accordingly gets into the movement path **87** of the display enclosure **15**, as shown in FIG. **15**. Accordingly, the relative rotation of the display enclosure **15** around the horizontal axis **24** of the first attitude can be restrained to an extent smaller than 180 degrees. Here, the range of the relative rotation may be set at 160 degrees, for example. As long as the horizontal axis **24** takes the first attitude, the restriction member **77** stays at the front position.

On the other hand, when the horizontal axis rotates around the vertical axis **25** from the first attitude to the second attitude, the elasticity of the coil spring **91** serves to urge the restriction member **77** from the front position to the retreat position. The contact piece **78** reaches the retreat position. The contact piece **78** retreats from the movement path **87** of the display enclosure **15**. This enables the rotation of the display enclosure **15** around the horizontal axis **24** of the first attitude over a range of 180 degrees. Here, the range of the relative rotation may be set at an extent equal to or larger than 180 degrees.

The cellular phone terminal **11b** enables an automatic movement of the restriction member **77** based on the action of the cam mechanism **88**. The user of the cellular phone terminal **11b** needs not get concerned about the position of the restriction member **77** when the user operates the cellular phone terminal **11b**. If the relative rotation is set at an extent of 160 degrees, the user is allowed to enjoy a superior acoustic performance of the cellular phone terminal **11b** in the manner as described above.

The bi-axial swivel mechanism **23** may be utilized in an electronic apparatus having a pair of rotation axis, such as a portable video cassette recorder (VCR), a portable digital assistant (PDA), a notebook personal computer, or the like, in addition to the aforementioned cellular phone terminals **11**, **11a**, **11b**, for example.

What is claimed is:

1. A bi-axial swivel mechanism comprising:

- a socket fixed to an enclosure;
- a support shaft received in the socket for relative rotation;
- a first hollow space penetrating through the support shaft along a longitudinal axis of the support shaft;
- a first hollow member extending in a first direction from a tip end of the support shaft along an imaginary plane intersecting with the longitudinal axis of the support shaft, said first hollow member defining a second hollow space extending in the first direction; and
- a second hollow member extending in a second direction opposite to the first direction from the tip end of the support shaft along the imaginary plane, said second hollow member defining a third hollow space extending in the second direction from a tip end of the first hollow space.

2. The bi-axial swivel mechanism according to claim 1, further comprising:

- a first elongated depression formed on an outer periphery of the support shaft all over a length of the first hollow space;